PROPANE GAS
Association of New England

Alternative Auto Fuel

Propane v. LNG, CNG, Electric, Hybrid


RACING EQUIPMENT
9 am- 9 pm • 7 Days a Week • 1-770-288-3200
I-75 at Hwy 155, Exit 216—McDonough
CENTRAL.com
Powered By
Summit Racing Equipment
Speed!
3M

Autogas Is Safe

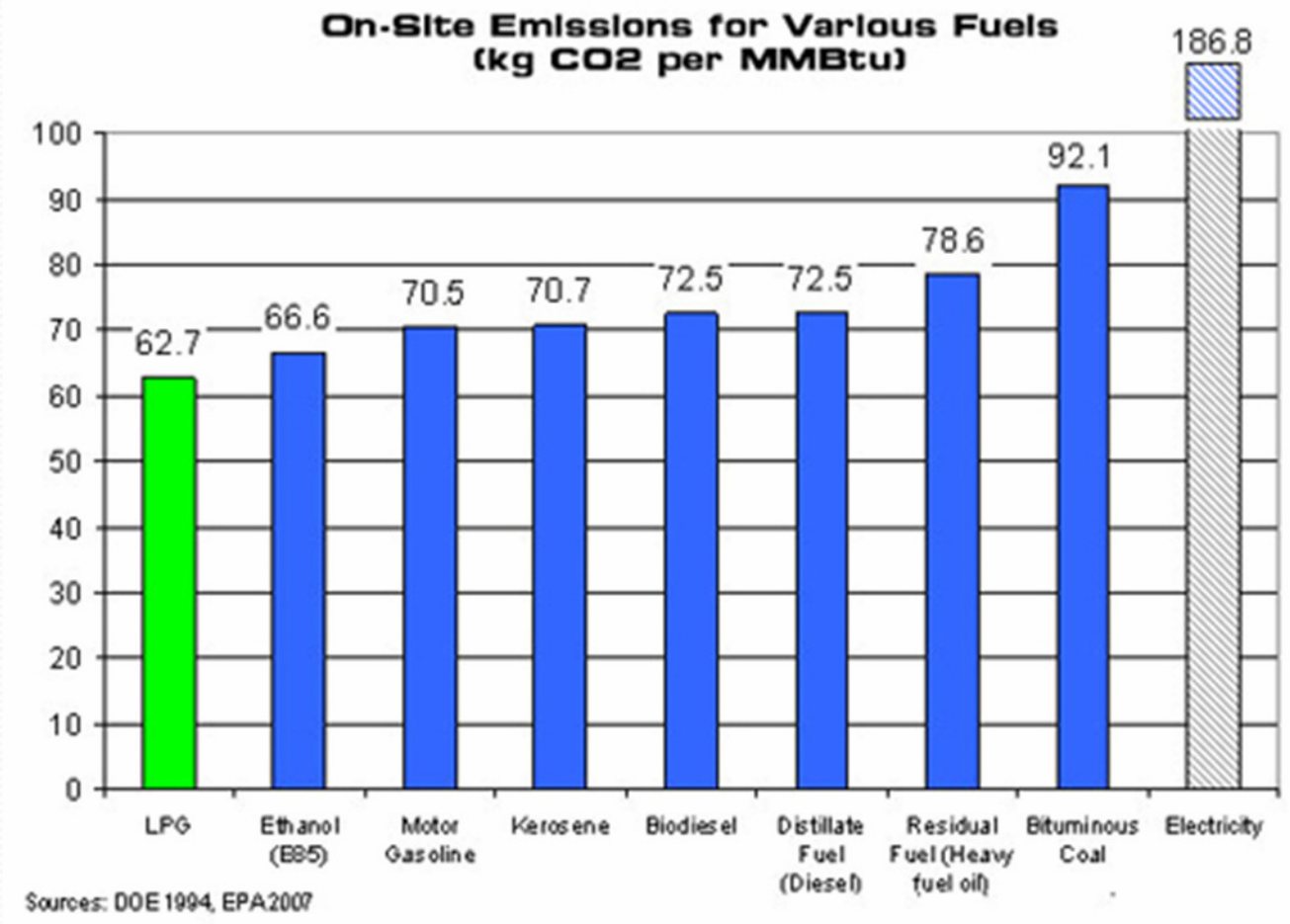
- Not only is propane an efficient, responsible, alternative fuel, but it is just as safe as gasoline.
- Propane is non-toxic.
- No risk to groundwater, surface water or soil
- Operator education is the key to safety.

Gaining Popularity

Future of Alternative Automotive Fuels

- Higher Efficiency
- Cleaner Burning/Lower Emissions
- Lower Fuel Costs
- Lower Maintenance Costs
- Domestic Stability

Cleaner and Greener



Domestic Fuel Consumption

- Gasoline

  37% of Petroleum products are domestic

- Natural Gas

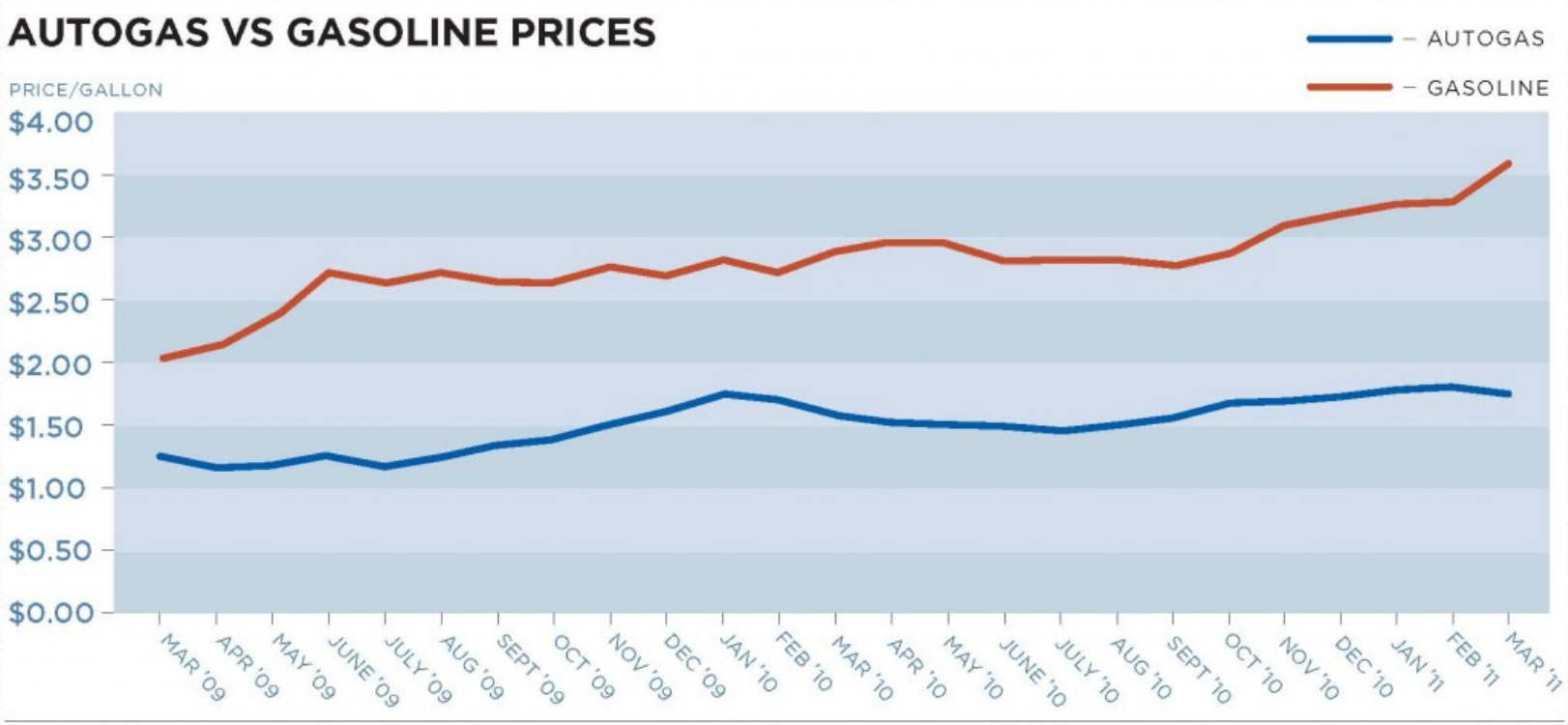
  88% of NG is domestic

- Propane

  90% of LPG is domestic

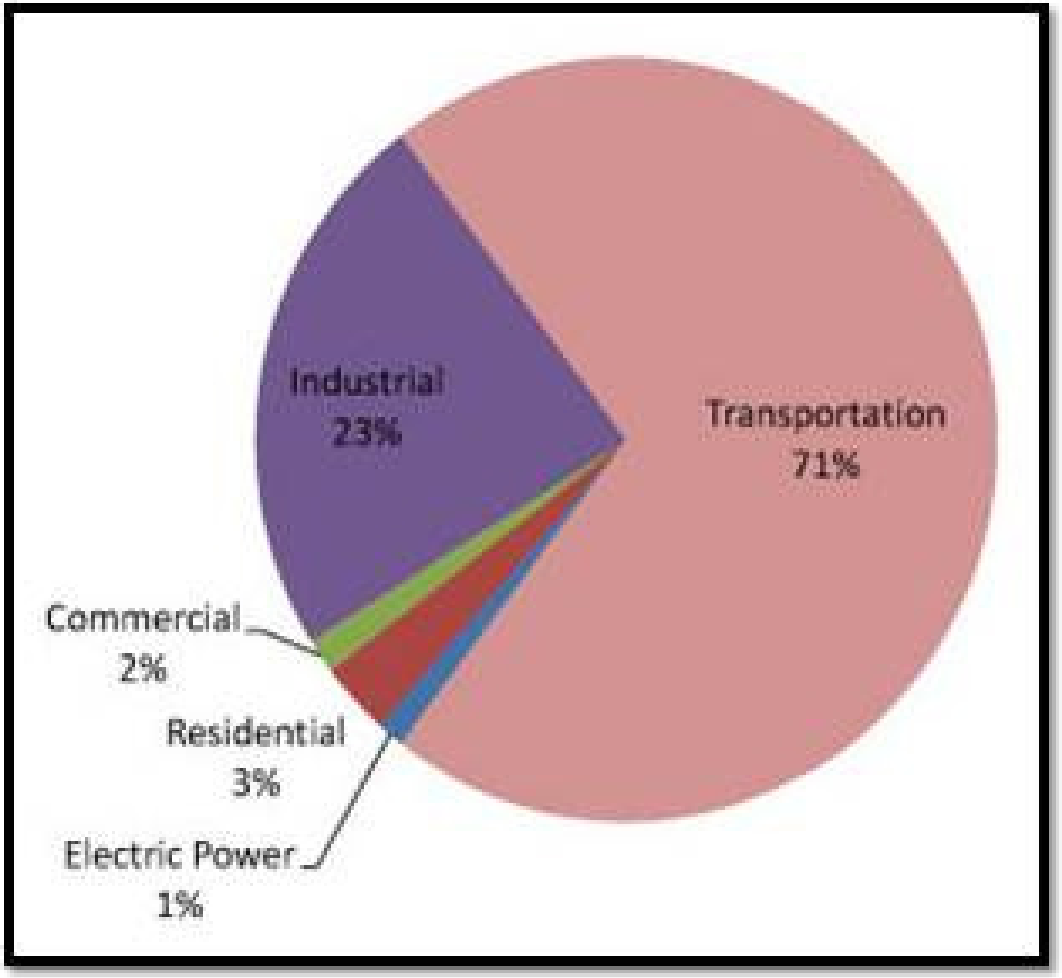
  7% from Canada

Price Stability



Note: The average cost of autogas reflects the 50-cent-per-gallon federal tax credit.

Reliance on Foreign Oil



Filling Stations - Cost

- Gasoline: $15,000 +
- CNG: $500,000 +
- LNG: $1,000,000 +

- **Propane: $12,000+**

  (Typically no cost to customer)

Filling Station Locations

- **CNG** – Must be within natural gas service area
- **LNG** – Only 10 filling stations in North America
- **Propane** – Anywhere a delivery bobtail can be driven

Filling Stations

Centralized LPG Refueling Advantages

- Single fuel bill, single price.
- No receipts to keep track of/get lost.
- Less wasted time at the gas station.
- No fuel loss – propane cannot be stolen.

Vehicle Range

- Electric:

  +/- 100 miles

- CNG, Plug-In Hybrid:

  +/- 300 miles

- Hybrid:

  +/- 600 miles

- LNG, Propane:

  Similar to comparable diesel/gasoline

Ease of Installation

- Propane conversions can be retro-fitted.
- Natural Gas, Electric and Hybrids must be energy-specific at time of manufacture.

Truck Engine Power

- CNG, LNG: 250-320 hp
- Electric: 160-180 hp
- Propane: 110% power of gasoline or diesel

LPG Maintenance

- Propane-powered engines require routine maintenance similar to their gasoline or diesel counterparts.
- No special certification required for mechanics to work on propane engines.
- Long-term benefits include fewer broken down parts, cleaner internal components, an estimated double in lifetime expectancy.

Drawbacks

- **Electric –** Diminished vehicle range, diminished freedom, very slow charge time, lack of creature comforts, luxury options.
- **Hybrid –** Reliance on gasoline as primary fuel, expense of initial purchase cost.

Drawbacks

- **Natural Gas** – Expense of filling stations, finite range, diminished power, extremely slow to fill, high cost (vehicle/parts).

- **Propane** – Lack of infrastructure, public perception of safety.

Federal Motor Fuel Tax

Gasoline	18.5
Diesel	24.4
PROPANE	18.4

* State taxes applying to motor fuel will vary.

Propane Gas Act of 2011

Tax Credits:

- Vehicles – 50-80% of cost of vehicles/equipment
- Stations – 30% of cost, up to $30,000.
- Fuel – 50 cents per gallon

Average Federal Tax Credits for Other AFV's

- Electric - $7,500
- Plug-In Hybrid - $7,500
- Hybrid - $2,200
- Diesel - $1,300
- CNG - $4,000

US DEPT. OF ENERGY

Alternative Fuels & Advanced Vehicles Data Center

www.afdc.energy.gov/afdc/

- Federal, State and Local Incentives.

More Incentives

- Non-taxable status is exempt from fuel tax.
- Free parking on city streets.

Roush CleanTech


SUPER DUTY

Roush Commercial

Propane Buses

LPG Lawn Care Equipment

Gasoline Lawn Care

- 18,000 gallons/year lost to “spillage”
- Lawnmowers account for 10% of air pollution in the US
- 1 lawnmower pollutes roughly as much per hour as a 1940’s automobile.

Propane Lawn Care

- Reduce airborne pollution by 70-80%
- Zero “spillage”
- Easy refueling:
  - Cylinder exchange
  - Bulk deliveries

LPG Opportunities

- Airports
- Law enforcement
- Buses and taxis
- Local/long-distance ground transport
- Anyone interested in capitalizing on the public recognition of being a progressive, “green” company.